BRIGHTTV VIEWERSHIP PROJECT DOCUMENT

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BrightTv Viewership Analysis

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Objective

Provide key insights to empower the CVM team in increasing subscriptions for current FY

Tools Used

Excel

Snowflake

PowerBI

PowerPoint

Methodology

→ Checking the completeness of the data

Checked the number of records, the nulls on excel before uploading the data on snowflake

→ Processing and Data transformation

Created a temporary table and added the data from user profile and viewership tables inner join, and renamed the nulls and nones as 'other' in the same query,

```
--creating a temp table , cleaning and joining the tables ( never work on the original)
create or replace Temporary table viewers_temp_tbl as (
   A.UserID,
   A.Name,
   A. Surname,
   A.Email,
       WHEN A.Gender IS NULL OR A.Gender = 'None' THEN 'other'
       ELSE A.Gender
   END AS Gender,
       WHEN A.Race IS NULL OR A.Race = 'None' THEN 'other'
      ELSE A.Race
   END AS Race,
   A.Age,
       WHEN A.Province IS NULL OR A.Province = 'None' THEN 'other'
       ELSE A.Province
   END AS Province,
   B.Channel2 AS Channel,
   B.RecordDate2 AS Date,
   B.DURATION_2 AS Duration
  viewers_tbl AS A
INNER JOIN viewership_tbl AS B
   on A.USERID = B."UserID"
```

Updated the Timestamp to UTC +2

```
-- converting UTC to african time

UPDATE viewers_temp_tbl

SET Date = CONVERT_TIMEZONE('UTC', 'Africa/Johannesburg', TO_TIMESTAMP(Date, 'MM/DD/YYYY HH24:MI'));

...
```

Created Time and Date column to split the timestamp into two columns

```
--Adding Column table

ALTER TABLE viewers_temp_tbl
ADD COLUMN Time TIME;

ALTER TABLE viewers_temp_tbl
ADD COLUMN The_date DATE;
```

Updated the columns by adding the data from the timestamp

```
-- Timestamp to time

UPDATE viewers_temp_tbl

SET Time = TO_CHAR(TO_TIMESTAMP(Date, 'YYYY-MM-DD HH24:MI:SS.FF3'), 'HH24:MI');
```

```
-- Timestapp to Date
UPDATE viewers_temp_tbl
SET The_date = TO_CHAR(TO_TIMESTAMP(Date, 'YYYY-MM-DD HH24:MI:SS.FF3'), 'YYYY-MM-DD');
```

Queried a Data from the Temporary table and added the bucket to categorize the age , Times and Duration

```
select userid,name,Surname,Email,gender,race,age,province, channel,the_date,time,
    duration,

-- case to classify the age
    case
        when age = 0 then 'Age_Not_Specified'
        when age between 1 and 12 then 'Children'
        when age between 13 and 17 then 'Teenagers'
        when age between 18 and 24 then 'Young_Adults'
        when age between 25 and 59 then 'Adults'
        else 'Seniors'

End as Age_groups,
    -- to classify the shows per channel
    CASE
    WHEN Time::TIME BETWEEN '05:00' AND '11:59' THEN 'Morning_Shows'
    WHEN Time::TIME BETWEEN '12:00' AND '19:59' THEN 'Afternoon_Shows'
    WHEN Time::TIME BETWEEN '20:00' AND '22:59' THEN 'Primetime_Shows'
    ELSE 'Midnight_Shows'
    END AS Shows,
```

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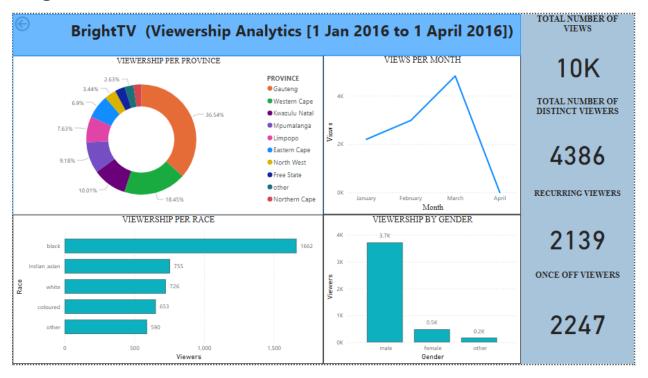
```
CASE
WHEN DATE_PART('HOUR', Duration::TIME) = 0 AND DATE_PART('MINUTE', Duration::TIME) < 30 THEN '< 30 M'
WHEN DATE_PART('HOUR', Duration::TIME) < 1 THEN '< 1H'
WHEN DATE_PART('HOUR', Duration::TIME) < 2 THEN '< 2H'
WHEN DATE_PART('HOUR', Duration::TIME) < 3 THEN '< 3H'
WHEN DATE_PART('HOUR', Duration::TIME) < 4 THEN '< 4H'
WHEN DATE_PART('HOUR', Duration::TIME) < 5 THEN '< 5H'
WHEN DATE_PART('HOUR', Duration::TIME) < 6 THEN '< 6H'
WHEN DATE_PART('HOUR', Duration::TIME) < 7 THEN '< 7H'
WHEN DATE_PART('HOUR', Duration::TIME) < 8 THEN '< 8H'
WHEN DATE_PART('HOUR', Duration::TIME) < 9 THEN '< 9H'
WHEN DATE_PART('HOUR', Duration::TIME) < 10 THEN '< 10H'
ELSE '> 10H'
END AS Watch_duration

from viewers_temp_tbl
```

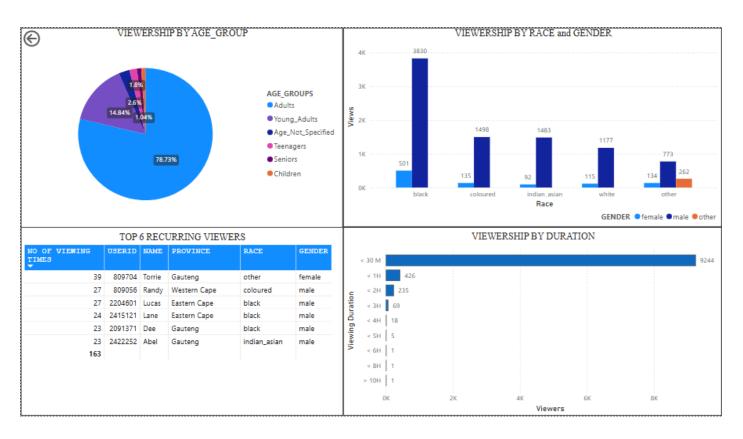
Extracted the Data from Snowflake

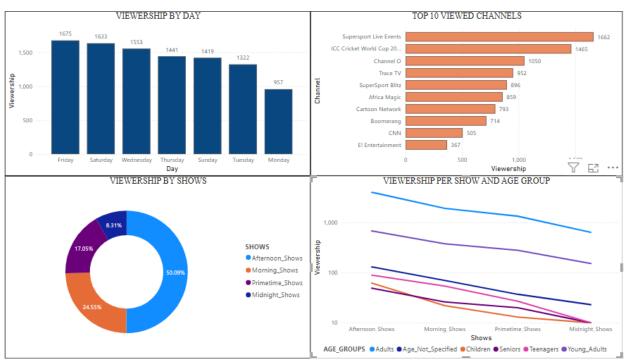
USERID	NAME	SURNAME	EMAIL	GENDER	RACE	AGE	PROVINC	ECHANNEL	DATE	TIME	DURATION	AGE_GRO	SHOWS	WATCH_DURATION	CHILLAR
97	LucasÂ	Woolard	Lucas 23	male	coloured	4	8 Free State	SuperSpo	2/4/2016	6:40:00	0:03:12	Adults	Morning_	< 30 M	Not_Chiller
132	CarterÂ	Wigfall	Carter 33	male	black	4	5 Gauteng	Boomera	1/11/2016	22:55:00	0:11:51	Adults	Primetime	< 30 M	Not_Chiller
212	KyleÂ	Martello	Kyle 63@	male	black	4	1 Gauteng	CNN	1/29/2016	19:15:00	0:21:57	Adults	Afternoon	< 30 M	Chiller
212	KyleÂ	Martello	Kyle 63@	male	black	4	1 Gauteng	CNN	1/6/2016	11:48:00	0:06:01	Adults	Morning_	< 30 M	Chiller
249	MarkusÂ	Wigfall	Markus 1	lmale	black	4	0 Gauteng	ICC Cricke	3/15/2016	17:33:00	0:09:20	Adults	Afternoon	< 30 M	Not_Chiller
483	HymanÂ	Lavoie	Hyman 8	male	coloured	3	4 Western 0	CNN	2/26/2016	16:13:00	0:00:00	Adults	Afternoon	< 30 M	Not_Chiller
649	BretÂ	Gettys	Bret 313@	male	black	3	1 Mpumala	Africa Ma	1/1/2016	13:35:00	0:01:32	Adults	Afternoon	< 30 M	Chiller

Insights



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ON THE POWER POINT PRESENTATION